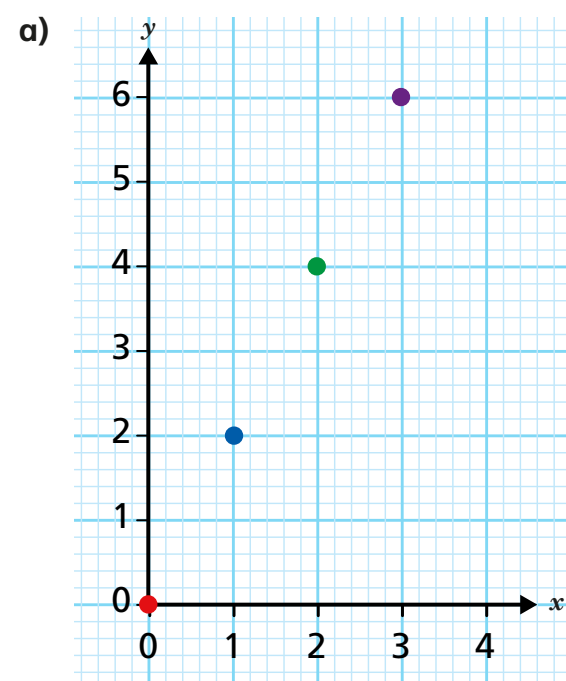


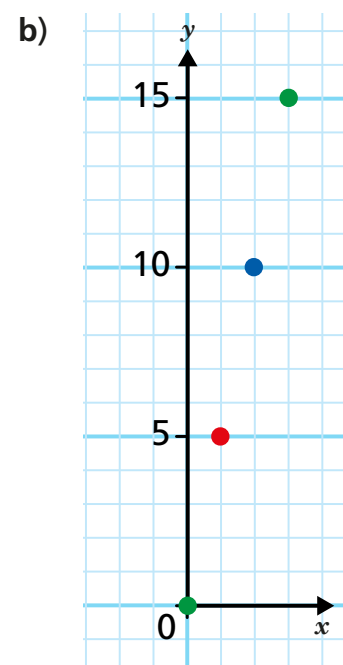
Recognise and use lines of the form $y = kx$



1 Which times-tables do the graphs show?



times-table



times-table

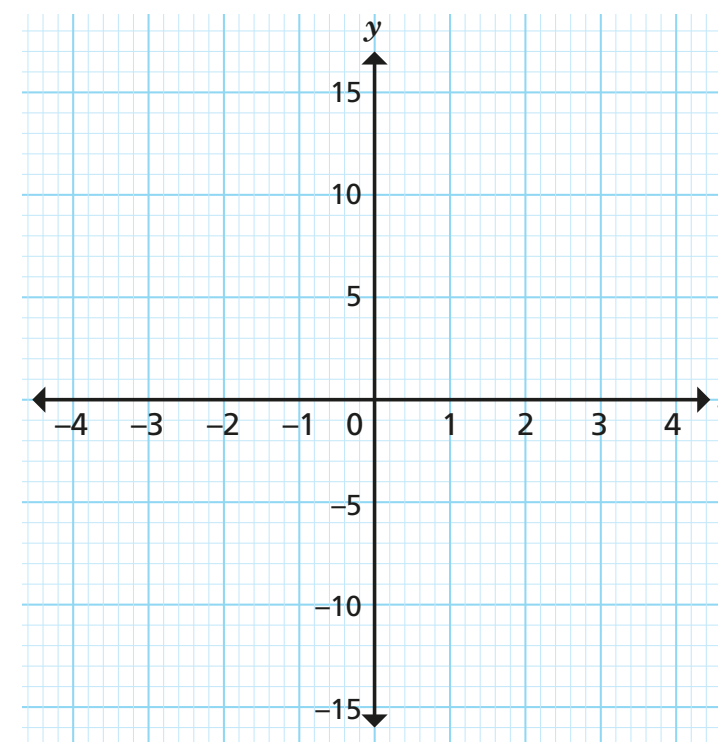
2 a) Complete the table of values for $y = 4x$.

x	-2	-1	0		2	
y	-8			4		12

b) Write the values in the table as coordinates.

$(-2, -8)$, $(\text{ }, \text{ })$, $(\text{ }, \text{ })$, $(\text{ }, \text{ })$,
 $(\text{ }, \text{ })$, $(\text{ }, \text{ })$

c) Plot the graph of $y = 4x$.



d) Complete the sentence.

On the graph $y = 4x$, the y -coordinate is always times the
 ____-coordinate.

3 a) Complete the table of values for $y = 3x$.

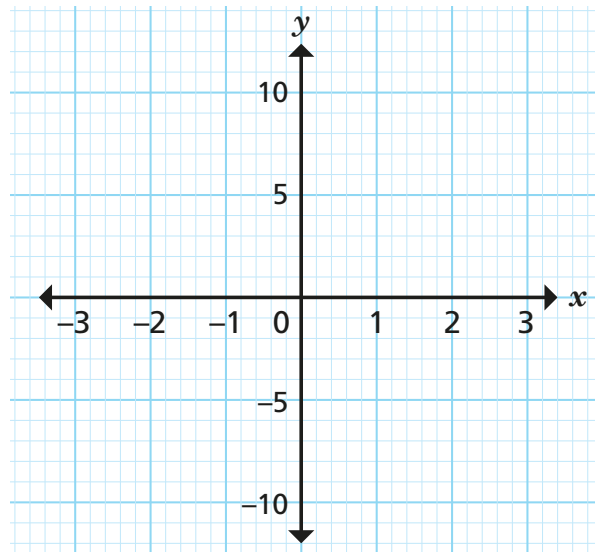
Use values of x from -2 to 2

x					
y					

b) Write the values in the table as coordinates.

$(\text{ }, \text{ })$, $(\text{ }, \text{ })$, $(\text{ }, \text{ })$,
 $(\text{ }, \text{ })$, $(\text{ }, \text{ })$

c) Plot the graph of $y = 3x$.

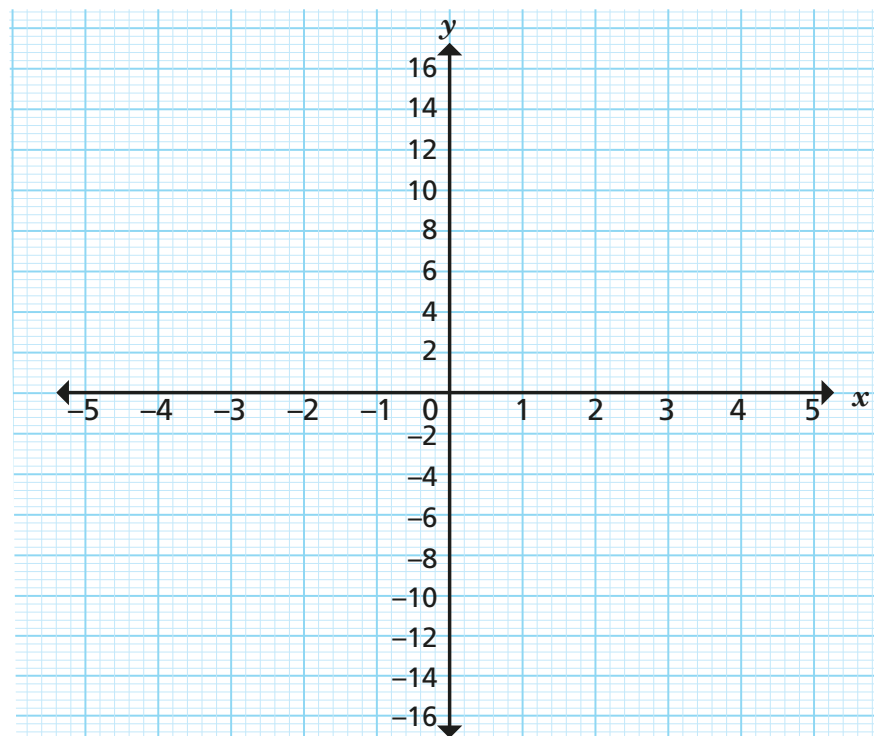


d) Complete the sentence.

On the graph $y = 3x$, the y -coordinate is always times the _____-coordinate.

4

Here is a blank coordinate grid.



a) Plot the graphs on the same grid. Label each graph.

A $y = 2x$ B $y = 5x$ C $y = \frac{1}{2}x$

b) What do you notice?

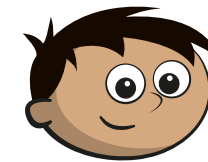
c) Complete the sentences to describe lines of the form $y = kx$

The _____ the value of k , the _____ the line.

All lines will go through the point _____



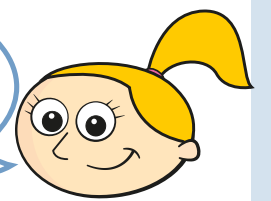
5



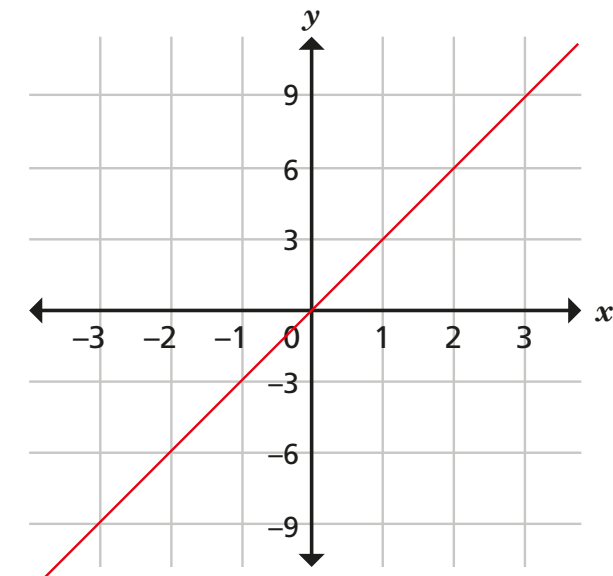
Amir

This is the graph of $y = x$.

This is the graph of $y = 3x$.



Eva



Who is correct? _____

Explain your reasons.

6

Put the graphs in order of steepness.

$$y - 3x = 0$$

$$y = x$$

$$3y = x$$

$$x = 3$$

